PATENT
J756-001 DIV

FLEXIBLE MOULD FOR CONFECTIONERY, BREAD-MAKING AND SIMILAR, WITH SUPPORT AND STIFFENING ELEMENT OF THE OUTER EDGE

CROSS-REFERENCE TO RELATED APPLICATION

[0001] This application is a divisional of pending U.S. patent application no. 09/975,230 filed October 11, 2001, the entirety of which is hereby incorporated by reference.

FIELD AND BACKGROUND OF THE INVENTION

[0002] The invention relates to flexible mold made of silicone for confectionery, bread-making or similar, particularly suited to the use both in traditional ovens and microwave ovens, consisting of a tray provided on the upper side, with an edge which extends outwardly, wherein this edge is equipped with a support and stiffening element, preferably consisting

of a metallic wire dipped in the silicone or of plastic or metallic frame partially co-stamped at sight, or manually inserted into a corresponding seta provided in the edge.

[0003] This feature considerably improves the handling of the ray, especially when it contains very liquid products, keeping unchanged those flexibility features that make easier to take fragile contents out of the oven and to deform and flatten it in order to store it into a reduced space.

[0004] As it is known, the molds for confectionery and bread-making are always made of rigid material, such as for example metal like aluminum, or refractory materials such as ceramic or vitreous materia, the latter used in particular in microwave ovens.

[0005] The rigid molds present several disadvantages, from the difficulty to take the product out of the mold without breaking it, to unsuitable dimensions when the trays must be stored.

[0006] These disadvantages can be overcome by means of flexible trays made of fabric of proper fibers coated by a synthetic material such as silicone. But also these trays present several disadvantages due to the difficulty to duly shape an unstretchable material such as the fabric, to obtain a tray with the required depth.

SUMMARY OF THE INVENTION

[0007] With the mold of the this invention, it is easier to take the product out of the mold, thanks to the

elasticity and the flexibility of the material and it is likewise possible to store the molds in a reduced space, thanks to the deformability of the molds.

[0008] These known molds include a duly shaped tray, provided, on the upper side, with an edge, always of silicone, which can extend outwards. This edge allows one to easily grip the tray and take out the product. The silicone molds represent an innovative product which can be perfected.

[0009] It was noted that the considerable flexibility and elasticity of the material creates some difficulties when there is the need to handle the molds containing a product, especially if the product is very liquid.

[0010] Under the effect of the weight of the product, a very flexible mold tends to deform, and if it is lifted by the edge, as usual, there is the risk to split part of the product.

[0011] To remove such a disadvantage, this invention proposes a silicone mold having, near the edge, a support and stiffening element able to give the mold the resistance required to carry the weight of the product without being deformed, keeping the flexibility features which allow to guarantee other advantages listed above.

[0012] The mold according to the invention is characterized by the particular embodiment which improves the handling of the product, increasing its usefulness and practicality of use.

BRIEF DESCRIPTION OF THE DRAWINGS

[0013] The invention will be described in detail by way of example without any limitation thereto, with reference to the attached figures, in which:

[0014] Fig. 1 is a section of a mold according to the invention;

[0015] Fig. 2 is a perspective view of the mold of Fig. 1; and

[0016] Figs. 3 & 4 are perspective views, in section, of further forms of execution of the idea of solution.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0017] With reference to the attached figures, 1 indicates, in its whole, a mold according to the invention, essentially consisting of a tray 2 in whcih the product to be cooked or heated is inserted and that is provided, on the upper side of its diverging side walls, with an edge 3 essentially consisting of a wing projecting outwards and which projection by a greater extent than its width. The bottom wall of tray 2 is flat.

[0018] The tray 2 has a sheet-like form, as best illustrated in Fig. 2.

[0019] Both the tray 2 and the wing 3 are completely made of silicone.

[0020] The silicone is a material able to resist the temperatures of an oven and turned out to be suitable to this aim thanks to its resistance and flexibility

features.

[0021] Peculiarity of the invention is to provide, near the perimetral area of the edge ro wing 3, a support indicated by reference numeral 4, essentially consisting of a metallic element 5, preferably a metallic wire such as steel or the like, dipped into a silicone coating 6.

[0022] The fact of providing the metallic wire dipped into the silicone, allows one to use the mold even in a microwave oven.

[0023] The stiffening wire will have such dimensions as to allow the mold to not bend under the strain of the contents, but such as to allow in any case a sufficient flexibility of the wings 3 and of the entire tray body.

[0024] The material can be steel or in any case, other suitable plastic material.

[0025] The stiffening element 5 can be directly incorporated into the mold during hte injection of hte silicone material, or, if necessary, it may also be applied afterwards, duly inserted into a seat provided in the silicone.

[0026] Through this solution, the mold may be easily handled, gripping it by the edges, even when it contains a liquid product, because the resistance of the support element 5 allows the mold to keep its shape without bending under the strain of the content. The silicone flexibility will always allow one to easily take the product out, to press the mold and to store it taking up a minimum of space.

[0027] A person skilled in the art may make changes and different versions that must be considered included within the competence of this invention.

[0028] In particular, in lieu of the metallic support element, one can provide a rigid plastic frame co-stamped with the silicon edge or taking the place of the latter, and which is applied for example by pressure, to the mold body, as shown in Fig. 3.

[0029] A further preferred embodiment of the invention provides for a reinforcing element consisting of a frame 10 (see Fig. 4) made of rigid or semi-rigid plastic material, which is inserted into a corresponding seat 11 made in the flexible edge 12 of the mold.

[0030] Preferably, the frame 10 is inserted into a seat provided at the lower surface of the edge.

[0031] The outer part 12 of the edge overlaps at least part of the frame 10, which is so held in place.

[0032] As shown in Fig. 4, the frame 10 and seat 11 have a generally rectangular cross-section.